



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

**THEMATIC Research Field: OPEN SYSTEM ARCHITECTURES, PROJECT ORGANIZING
AND THE INDUSTRIAL DYNAMICS OF THE NEW SPACE ECONOMY**

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

The strategic use of modularization and standardization of system design along with co-innovation and open innovation practices are radically changing complex project businesses. This transition is one of the key enablers of the New Space Economy. The concept of Open system Architectures is enabling a large variety of missions, while assuring compatibility with a wide range of launchers, by customizing the same tech platform. The benefits of Open system Architectures include reducing manufacturing time and costs, enhancing reusability of HW and SW modules, and creating additional revenue streams along the system life cycle. How to address the new opportunities and challenges in the governance and management of such complex projects and programmes is still largely unknown and underinvestigated.

Methods and techniques that will be developed and used to carry out the research

The candidate will develop her/his research in tight collaboration with a leading European company in the Space Industry and research partners involved in the joint research initiative. The research project will leverage the literature on system engineering and value creation in complex projects. The research approach will mixed qualitative and quantitative methods, such as case study methodology and economic and financial assessment of capital investments.

Educational objectives



	The research is multidisciplinary in nature: the candidate will develop advanced research skills in the areas of complex projects and programme management, system engineering, and business model innovation. She/he will learn how to design and conduct a research project, adopting the proper methodologies for data collection and analysis, and to present and publish results in both academic and practitioner outlets.
Job opportunities	The successful completion of the programme will open several job opportunities in both academia and companies, in research, consulting and managerial roles.
Composition of the research group	4 Full Professors 0 Associated Professors 2 Assistant Professors 0 PhD Students
Name of the research directors	Proff. Paolo Trucco and Giorgio Locatelli

Contacts
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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p><i>Funding for educational activities: 5.700,00 Euros for three years.</i></p> <p><i>Teaching assistantship: There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.</i></p> <p><i>Desk availability: shared use</i></p> <p><i>Computer availability: individual use</i></p>